Rig Type: *Jack-Up*

   F&G L-780 Mod V

Classification Society: *ABS*

Code design: *ASD*

   (WSD method)

**Click below to see model 3D!**


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To view 3D documents

Project description: *Rig Engineering (RE) was tasked by a leading Drilling Contractor to undertake a feasibility study to review the recurring defective welds at the pedestal to deck and also at the pedestal to mounting flange connections. This feasibility study is to identify the stress state and what precautionary measures need to be implemented to reduce the recurrence of these In Services defective welds. RE provides global and local strength verification along with construction drawings of the required reinforcement to reduce the stress ranges at these locations that are identified by In Services inspection means and FEA route.*
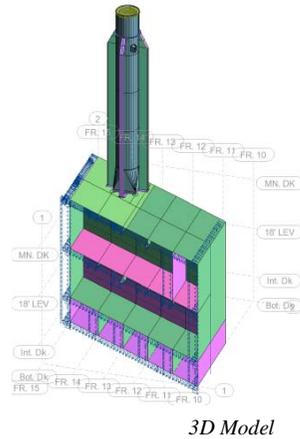
FEA model of existing structure

3D Model

Stress Plot
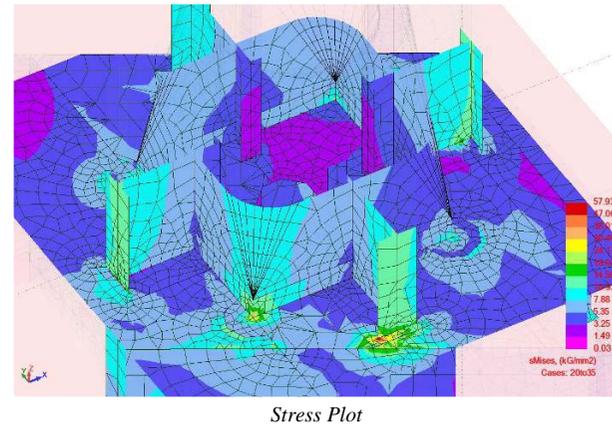
FEA model of proposed structure

Proposed Solution

Stress Plot and Deformation
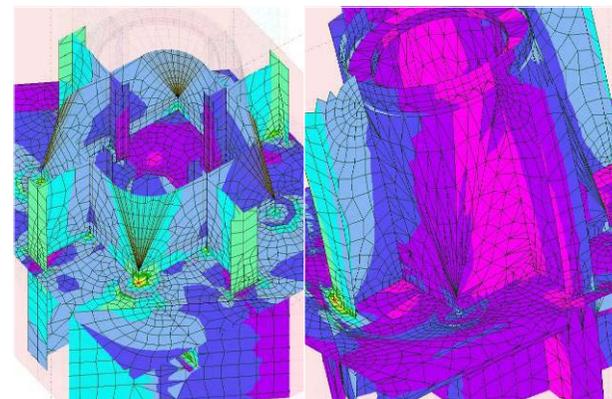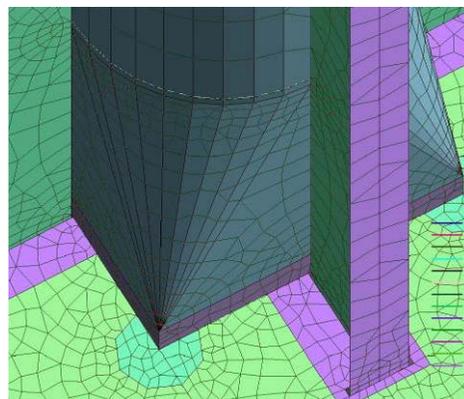
R.E. scope of work

R.E. accomplishes this assigned tasks by performing following work break down structure (WBS). These are:

1. *Construct the structural model of the hull and crane pedestal.*
2. *Load the FEA model with owner furnished loading regime from crane's manufacturer manual.*
3. *Assess the stress state of each element.*
4. *Strengthen the areas out with the code allowable stress and rerun.*
5. *Propose strengthening methods and optimize one solution for ease of implementation.*
6. *Submit feasibility study to Class Society on behalf of owner.*

Engagement Condition

Upload your problem to us and give us relevant input to allow us to resolve your problem, we will need:

1. *As-builts with crane and deck details*
2. *Crane load chart*
3. *Extract from Marine Operation Manual with deck loads for area under consideration*

Rev. 3